

**MISSOURI DEPARTMENT OF NATURAL RESOURCES,  
DIVISION OF ENVIRONMENTAL QUALITY,  
PUBLIC DRINKING WATER PROGRAM**

**MISSOURI'S  
CAPACITY DEVELOPMENT STRATEGY  
FOR EXISTING PUBLIC WATER SYSTEMS**

**JULY 19, 2000**

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## GLOSSARY OF TERMS AND ACRONYMS USED IN THIS REPORT

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**Capacity:** Refers to the capabilities required of a public water system in order to achieve and maintain compliance with the drinking water rules. It has three elements:

**Technical:** Technical capacity or capability means that the water system meets standards of engineering and structural integrity necessary to serve customer needs. Technically capable water systems are constructed, operated, and maintained according to accepted quality standards.

**Managerial:** Managerial capacity or capability means that the water system's management structure is capable of providing proper stewardship of the system. Governing boards or authorities are actively involved in oversight of system operations.

**Financial:** Financial capacity or capability means that the water system can raise and properly manage the money it needs to operate efficiently over the long term.

**TMF:** Technical, Managerial, and Financial– This abbreviation is used to save space in the report and avoid frequent repetition of these terms, defined previously.

**CCR:** Consumer Confidence Report – An annual water quality report required by the 1996 SDWA amendments, which summarizes information on source water, levels of any detected contaminants, compliance with drinking water rules, and educational material.

**CEU:** Continuing Education Unit – Formal credit for participation in education and training programs, often necessary for maintaining certification or licensing status.

**DWSRF:** The Drinking Water State Revolving Loan Fund - Congress authorized this fund in 1996. The Missouri Public Drinking Water Program administers the DWSRF.

**EFC:** The Environmental Finance Center at Boise State University - An organization that operates under an EPA charter to provide assistance to States and communities on matters concerned with financial management and access to financial assistance.

**Escalation Policy:** The Public Drinking Water Program policy's outlining escalating actions to be taken in response to violations of drinking water standards.

**SDWA:** The Safe Drinking Water Act – Passed by the US Congress in 1974 and amended in 1986 and 1996.

**US EPA:** The US Environmental Protection Agency - This Federal agency oversees

State programs and provides financial support. EPA determines when a State's capacity development program is in compliance with the safe drinking water act.

**MDNR:** The Missouri Department of Natural Resources – This agency is responsible for protecting and preserving Missouri's natural resources and has several divisions within: Energy, Environmental Quality, State Parks, Geology & Land Survey, and Administrative Support.

**PDWP:** Public Drinking Water Program – This Program is a part of the MDNR Division of Environmental Quality and is responsible for administering the drinking water standards in Missouri through a primacy agreement with US EPA.

**TAP:** This Technical Assistance Program is a program with in the MDNR Division of Environmental Quality and is responsible for assisting the public with regulatory/policy issues within the Division of Environmental Quality.

**EMI:** The Environmental Management Institute – The TAP offers EMI training throughout the state to Public Officials and Managers to provide the knowledge how to properly manage water system operation, infrastructure and long-term fiscal management to maintain capacity and continuous service.

**UCA:** The TAP's User Charge Analysis to be used to determine financial capacity.

**MAP:** Midwest Assistance Program

**MRWA:** Missouri Rural Water Association

**AWWA:** American Water Works Association

**MBA:** Missouri Banker's Association

**MWWC:** Missouri Water & Wastewater Conference

**PSC:** Missouri Public Service Commission

**DOH:** Missouri Department of Health

**W&WWRC:** Missouri Water & Wastewater Review Committee

## SECTION I - Solicitation and Consideration of Public Comments

1. Describe how the State, in preparing its capacity development strategy, solicited public comment on the program elements listed in §1420(c)(2)(A-E) of the SDWA, as amended in 1996.

The Missouri Department of Natural Resources' Public Drinking Water Program (PDWP) invited various water organizations, agencies, and water utilities to be involved in a series of Stakeholder meetings to develop and solicit comment on the Missouri Report of Findings (ROF), see Appendix G. The ROF is a document that lays out the five key elements required by §1420(C)(2)(A-E) of the Safe Drinking Water Act (SDWA), as amended. The Advisory Committee met in November of 1998 and held ten stakeholder meetings to derive a final draft of the Missouri ROF. The Stakeholder Group, as identified in the ROF as the Advisory Committee, commented on the draft ROF and assisted in the finalization of the report prior to solicitation of public comment. The Stakeholder Group also assisted and provided input on how to distribute and educate the ROF to assure proper solicitation of comments. Many of the water organizations and state agencies within the Advisory Committee provided Capacity Development training to distribute the ROF for public comment and continued to provide training after the comment period was over. The solicitation efforts included the following:

- The PDWP sent direct mail out to all Community and Non-Transient Non-community water systems (See Appendix F),
  - Public News Release for Public Comment and notice of available public meetings for comment (See Appendix F),
  - 6 Regional Meetings for Public Comment and training in 1999:
    - November 10<sup>th</sup> at SWRO,      November 15<sup>th</sup> at JCRO,
    - November 16<sup>th</sup> at SERO,      November 18<sup>th</sup> at NERO,
    - November 19<sup>th</sup> at KCRO,      November 19<sup>th</sup> at SLRO
  - Meeting Presentation and Distribution for Public Comments:
    - AWWA – November 5<sup>th</sup> 1999,
    - December 22, 1999,
    - March 1, 2000
    - MWWC - November 1999
    - PSC - December 15<sup>th</sup>, 1999
    - MRWA - March 15<sup>th</sup>-16<sup>th</sup>, 2000 Presentation Only
    - TAP Environmental Management Institutes – 6/yr, distribution at St. Louis EMI, 2 of which the ROF was distributed for comment
    - Regional Office Request for Comment
- Internet: <http://www.dnr.state.mo.us/homednr.htm>  
<http://www.dnr.state.mo.us/homepdwp.htm>  
EPA link
- Newsletters:
    - MDNR – TAP into DNR Newsletter

Copies of the material used in proactive outreach effort are included in Appendix F.

2. Describe how the State considered public comment on the program elements.

The Advisory Committee commented on the draft report of findings in the Stakeholder meetings and finalized the report prior to sending out for public comment.

The PDWP received approximately 30 requests via email for the ROF. The ROF and the comment sheet/questionnaires (see Appendix F) were provided during the training sessions and via email as requested. There were a total of 7 comments and 3 recommendations. These are included in Appendix F.

The comments regarding the financial capacity issue not placing unreasonable burden on existing water systems with the condition that MCLs are maintained, not requiring proportional rates, and not requiring financial burdens for small water systems and secondary distribution systems are addressed by the PDWP staff by the following:

As discussed in Section A of the ROF, the technical, managerial, and financial (TMF) capacity requirements are only required by existing water systems with Administrative Orders (AO) for Significant Non-Compliance (SNC), as agreed to by the Advisory Committee and as required in Missouri State Statute 640.115 and Missouri Regulations 10 CSR 60-3.010(3)(B) and 10 CSR 60-3.020(5) (See APPENDIX H). The systems with AOs for SNC status will be required to have a financial capacity assessment performed by the DNR Technical Assistance Program utilizing the user charge analysis software (See Appendix J) which is used to calculate the user charge required to meet operation & management costs, capital improvement costs, debt obligation costs, and reserves needed. The system will be required to make a change in rate structure to meet all the necessary modifications/additions as described in the AO or the Permit to Dispense Water to the public may be revoked. This MDNR Technical Assistance Program's User Charge Analysis (UCA) does not require proportional rates, as was commented on.

All other systems that were in existence prior to October 1, 1999 will not be required to have the Financial Capacity assessment, rather the Regional Offices will offer the financial assistance during the sanitary surveys. This financial assistance will be conducted by TAP, as requested, utilizing the user charge analysis software.

To address the comment in regard to TMF meeting attendance being required for certification requirements and Continuing Education Units given for attendance, the PDWP provided a written comment to the head chair of the Operator Certification (OC) Rulemaking Committee for consideration in the revisions to the OC Regulations. Continuing Education Units will be given for TMF related training and courses including upcoming rule training. Meeting attendance in rulemaking is not mandatory and there is no authority empowering the state to require attendance as such meetings.

To address the comment requesting the acceptance of existing operators and staff of compliant systems is currently being addressed in the Operator Certification Rulemaking process and will not be influenced by the Capacity Development requirements. This comment was also provided to the head chair of the OC Rulemaking Committee. Operators in a responsible charge positions will be provided an adequate time period to comply with requirements of the system. The Grandparenting rule should address that issue with existing non-transient non-community water systems currently not required to have a certified operator, depending on compliance status.

The other comments received indicate the Advisory Committee adequately addressed TMF Capacity issues in the ROF. The recommendations for specific emphasis on Section C items 1, 2, and 6 of the ROF, pages 18 and 19, were considered in the inclusion of the program elements selected in the strategy.



## **SECTION II - Program Elements**

1. Describe how the State considered the appropriateness of each program element listed in §1420(c)(2)(A-E) in deciding whether or not to include the element in its capacity development strategy.

§1420(C)(2)(A) is addressed in the ROF in Section A “Methods or Criteria to Prioritize Systems in Need of TMF Assistance”. The Advisory Committee deliberated the issue of how current information could be used to identify and prioritize systems needing TMF capacity building. Discussions occupied portions of two meetings. As a result of the considerations identified in Section A, page 5 of the ROF, the ranking scheme illustrated in the flowchart on the following page (Table A1 of the ROF) was developed. Systems are chosen for attention under the strategy based upon their compliance record as a first screening. A hierarchy of violation types, based on public health risk, was developed by the Drinking Water Program (See Table A2 of the ROF). This hierarchy is used to assign compliance problems to **critical (Class 1)**, **serious (Class 2)**, or **potential or future problems (Class 3)** categories. Systems will be ranked according to the relative seriousness of the problems of that system. Systems with Administrative Orders for Significant Non-Compliance will be required to have TMF Capacity and will receive TMF analysis and assistance first and foremost. These systems were not included in the flow chart since they are required to have TMF Capacity by regulation and are obvious to have first priority. Illustrated in the flow chart, systems in Significant Non-Compliance but do not have an Administrative Order (Class 1 or Class 2 category), will receive the TMF analysis and assistance first. These systems will go through a voluntary compliance process called Conference, Conciliation, and Persuasion, in which a Bilateral Compliance Agreement is formed with a set time frame for returning to compliance. If the SNC does not return to compliance or show progress toward compliance, TMF Assistance will be offered prior to enforcement action. Consideration was given to the willingness of the compliant systems and they will be the next to receive TMF analysis and assistance. These are the Class 3 Category systems, systems with potential for future problems as indicated by operational test data collected. The PDWP attempts to collect data from every water system that upcoming rules will apply. Some examples of the test data collected are for disinfection by-products, radon, some radionuclides, and virus. And last, the systems that voluntarily request assistance will be provided TMF Analysis and Assistance, as resources allow and upon completion of Class 1, 2, and 3 systems.

The nature of the assistance offered under the capacity development program may be determined only after an assessment of the TMF capacity of the water systems that are ranked highest. TMF capacity review will be accomplished by "enhanced" sanitary surveys utilizing the existing system TMF Checklist (Appendix A) and sanitary survey forms and will be carried out by the State or by a third party evaluation conducted on site with the state's and the system's cooperation.

Section C of the ROF discusses several of the activities that will be carried out as a result of the assessment. For systems with Administrative Orders (AO) for Significant Non-Compliance, the items on the TMF Checklist will be required in addition to other regulatory requirements as set in the conditions of the AO.

For Class 1 and 2 Category systems, the TMF Checklist will be utilized to assess the requirements of TMF Capacity. If there are deficiencies in technical, managerial, or financial areas of capacity, those items will be required if the system does not return to compliance and is issued an Administrative Order. TMF Assistance will be provided prior to that occurrence in an attempt to bring the system into compliance.

For all other systems, upon completion of the enhanced sanitary survey, the PDWP Inspector(s) will meet with the system operation and management staff to discuss the items on the checklist necessary to meet TMF Capacity and any other deficiencies noted. Assistance for financial capacity and long-term financial planning will be offered to the system if needed and will be provided by the Technical Assistance Program utilizing the User Charge Analysis (Appendix J). Other assistance provider contacts may be suggested to the system upon completion of the enhanced sanitary survey.

**§1420(C)(2)(B)** is addressed in the ROF under Section B; page 9 “Factors that Enhance or Impair Capacity Development”. The Advisory Committee identified 83 factors on the Federal, State, and Local levels that either enhance or impair water system TMF Capacity. Of these, the Advisory Committee specified 39 factors for consideration as part of the strategy and these are specifically noted in Section B of the ROF. The remaining factors are noted in the Appendix A of the ROF (See APPENDIX G). The factors chosen by the Advisory Committee were considered as a basis in developing and selecting the Program Recommendations for improving TMF Capabilities of public water systems. The Program Recommendations were considered in the inclusion of the program elements selected in the strategy.

**§1420(C)(2)(C)** is addressed in the ROF in Section C, page 17, “Recommendations on How the State Can Use Its Authority and Resources to Help Water Systems Improve Capacity” and is based on the enhancements and impairments selected by the Advisory Committee. There were 10 Program recommendations and one general recommendation considered, as outlined in the Executive Summary Page ii and detailed in Section C of the ROF. The Program Recommendations, defined in Section C, are summarized in the executive summary of the ROF, page i. The table below illustrates the actions to be taken to satisfy the program recommendations including an anticipated time schedule/frequency for each action.

The General recommendation for the need to collect TMF information and share it with individuals responsible for TMF aspects of running the system is addressed by the development of the existing system TMF Checklist and enhanced sanitary surveys including meetings with management staff following the survey to discuss deficiencies and offer technical assistance.

The Program Recommendations that were selected to be in the strategy are as follows:

- Program Recommendation number 1, CEU will be given for operator attendance at training incorporating TMF rules and upcoming rules. Upcoming rules status updates are currently provided in technical bulletins such as Water & Wastewater Digest, operator training courses, Technical Bulletins and Fact Sheets. Direct mail outs have also been a part of the PDWP attempt to get the word out on upcoming rules. The PDWP will continue to provide information in technical bulletins, fact sheets, drinking water publications, training courses, etc. to keep the operators informed of rule status. Departmental Fact Sheets, technical bulletins, news releases, rules, permitting requirements, etc. are provided on the DNR web site <http://www.dnr.state.mo.us/homednr.htm>.
- Program Recommendation number 2 is included in the strategy as a request to the U.S. EPA for an annual Consumer Confidence Report-style report on its performance in overseeing implementation of SDWA for the state of Missouri. This will help the PDWP identify ways to improve relations and will enhance the effective expenditure of the state's limited resources.
- Program Recommendation number 3 to address the concern of perception of consistent safe drinking water is included in the strategy by the following: continued provisions of the Consumer Confidence Reports (CCRs) in order to increase management accountability for delivery of safe water and water quality knowledge of customer and by continued educational programs such as outreach visits to schools, Earth Day functions, State Capitol Environmental Day, Safe Drinking Water Week functions, State Fair displays, and other public educational activities for the public. The PDWP assists water systems with CCR development and has a database that will provide all relevant information to be incorporated into their CCR. This effort does ensure that all accurate and relevant information is included for the public's knowledge.
- Program Recommendation 4 describes a need for larger systems to assist smaller systems in public education efforts. This recommendation was considered in the strategy and is addressed by the following: In the past, TAP and the Regional Office staff have requested larger systems to offer their public utility facilities and assist in gathering local managers of nearby systems to attend training opportunities. This has proved to be affective and has increased relations between bordering systems and will continue to be encouraged. Extra effort to encourage large systems to provide assistance to nearby water systems will be provided during enhanced sanitary surveys. Model Emergency Operation Plans (EOPs) are provided to community water systems by the PDWP. These Model EOPs encourage mutual aid agreements with nearby water systems. In addition the DNR Regional Offices provide annual training to water systems and encourage this coordinated effort and use of resources. The PDWP also has model ordinances, publications, etc, that is available by TAP's web site. The PDWP will encourage other assisting agencies/organizations to incorporate resource sharing between water systems in their training programs.

- Program Recommendation 5 is the need for encouraging partnerships between agencies and among water systems and is addressed in the strategy by the following: The EMI training sessions targeted toward Board Members and public officials will continue and the Regional Office staff will provide extra meeting time with both water system officials and operation staff to discuss needs and future planning issues. The PDWP will coordinate Capacity Development efforts at least annually with the other technical assistance organizations and request training be provided at annual conferences/training courses. Contract agreements may be formed for specialized TMF Capacity assistance to specific water systems. A draft agreement is located in Appendix I.

The Water and Wastewater Review Committee (W&WWRC) consists of all state funding agencies and they meet twice a month to discuss funding for project development. This effort has been successful in coordinating funding to deserving systems that are managerially and fiscally secure, and not crediting systems for lack of operation and management. This effort will continue. A copy of the W&WWRC application is included in Appendix B.

As stated in Bullet number 4, the PDWP encourages water systems to work together to utilize resources during training, and other agencies will also be encouraged to incorporate this effort in their training program.

- Program Recommendation number 6 is the need for inter-agency communications for improving the funding for TMF related programs. This is included in the strategy by the following: Comprehensive planning will continue with the W&WWRC meeting to discuss funding project development as discussed in number 5 response. The increased communication with the Department of Health has already started to discuss PDWP and DOH responsibilities and needs for coordination. Meeting minutes and correspondence to this effort is included in Appendix F. The DOH and PDWP will continue this implementation plan to coordinate efforts. The Missouri Public Service Commission (PSC) and DNR PDWP coordination on financial capacity is a necessity. If a financial analysis is performed on any PSC regulated water system, the results of the analysis will be provided to the PSC. Enforcement of financial capacity on PSC regulated water systems will be coordinated throughout the process of enforcement.
- Program Recommendation number 7 is the challenge of small systems acquiring capital resources for improving or replacing water system infrastructure. This is included in the strategy by the following: The W&WWRC currently does meet to discuss possible funding options specifically to systems that have not failed due to lack of operation and maintenance. Also the Small systems Engineering Report Services currently being provided to small water systems requires the system to apply to the W&WWC for project development upon engineering report approval. This also coordinates funding efforts to make certain they are going to be applicable to small water systems. These two processes will continue. The Missouri Banker's Association is also a part in the funding of water system loans. The PDWP will evaluate other possibly funding possibilities with the MBA (e.g., link loans).

Additionally, PDWP and TAP will coordinate with the Missouri Bankers Association to explore alternative financing options for water systems and disseminate the information to the systems. PDWP and TAP will also disseminate information on the use of “self-help” strategies and volunteers as means to reduce the cost of water system improvements. The TAP will continue to offer user charge analysis software and analysis assistance as tools to help communities acquire funding and generate their own funds for systems upgrading.

- Program Recommendation number 8 is the need for rate setting and financial management training to small water systems in order to improve financial and managerial capacity. This is included in the strategy by the following: The PDWP has provided financial capacity training with several water organizations, however the outreach effort was primarily to operators. However, the TAP offers the fiscal capacity and financial management training to managers and board members 6 times per year during the EMI sessions, which is a more effective outreach since the managers have the financial control. TAP also has created a diskette to be used by the system on an annual basis or as needed and keeps a list of all systems utilizing the User Charge Analysis (UCA). Every time the UCA is updated, the updates are distributed to all users. This process will continue.
- Program Recommendation number 9 is the need for considering opportunities for consolidation of existing systems and assurance of adequate capacity in new ones. The inclusion in the strategy is as follows: The PDWP has regulations preventing the construction authorization to proposed water systems within the legal boundaries of a higher preferential order existing systems unless a waiver is obtained. The drinking water program also has regulations for new systems commencing operation after October 1, 1999 to have TMF Capacity prior to issuance of Construction Authorization and Permit to Dispense. This will eliminate systems developing without first having TMF Capacity. Consolidation is encouraged for existing systems when systems apply for funding and during review of engineering reports. The engineering report requires evaluation of all alternatives and cost estimates for each to support the selected option. The PDWP may concentrate future set asides to the purpose of regionalization/consolidation of existing facilities. The USDA Rural Development Planning Commission offers training to engineers annually. The PDWP will coordinate with the USDA to incorporate TMF Capacity training into the annual engineer training. There is also a Missouri Regional Planning Association that encourages consolidation/regionalization. The PDWP administers part of the 2% set aside of the SRF Program to assist small water systems with engineering report services to assess all water system needs and option for consolidation. This process was successful in 1999, is underway in 2000, and will continue, as funds are available.
- Program Recommendation number 10 is the recommendation for supplemental training materials at the EMI sessions for board/council members that would help them understand their roles and responsibilities in oversight of the water system. This is incorporated into the strategy and there is currently a binder of material that is provided to the members at these training sessions. The MAP also provides pamphlets/brochures

and training materials to board members and managers. One training tool is titled “Board Members Responsibility”. The Kansas Rural Water Association’s Bible is also one tool available to operators/managers. County Commissioners are required to attend the EMI training offered 6 times per year and they receive the material presented in addition to regulations, ordinances, technical bulletins, etc. This information is accessible on the DNR Technical Assistance Program’s web site. The PDWP also writes articles to be incorporated into the Water and Wastewater Digest, which is sent to operators, engineers, mayors, and managers. Training notices publicizing the EMI training opportunities could be placed in this publication.

The table below offers a general scheme for the description, development, and implementation of the ten recommendations discussed above.

<b>Recommendation</b>	<b>Implemented by....</b>	<b>Approximate Target Date for Delivery of Services....</b>
1) Enhanced Sanitary Survey	NA	Currently underway—ongoing
2) TFM Self-Assessment Tool	NA	Already drafted for use – update ongoing
3) Training for PDWP Staff and Interested Consultants	Internal PDWP staff and RO Staff	1 <sup>st</sup> quarter 2001 and every 1 <sup>st</sup> quarter of each year
4) Proactive Distribution of Information, Bulletins, articles, etc.	Internal —make maximum use of Technical Assistance Program and other third party sources	Fall 2000
5) Water System Financial Training and Capital Facilities Management Planning	Technical Assistance Program Environmental Institute	Currently done, continue at least 6 times each year
6) Training incorporated into other organization training programs (MBA, MRWA, PSC, MWWC, MAP, AWWA, USDA)	PDWP staff and/or training organization staff	Annually

§1420(C)(2)(D) is addressed in the ROF in Section D “Measuring the Success of Missouri’s Capacity Development Strategy and is summarized in the executive summary of the ROF. Basically, there were 4 ways to measure success suggested. Those being system-specific compliance tracking to more accurately measure the effectiveness of the capacity building efforts; annual outreach and assistance tracking including the number of sanitary surveys, technical assistance site visits, and number of water systems provided TMF assistance; conducting “customer surveys” to obtain feedback from water systems that received assistance; and planning activities to track the number of systems that voluntarily make efforts to assess and improve TMF Capacity. Another way to measure success may be by tracking continued future compliance of systems that were previously non-compliant and tracking the reduction of the number of SNCs that are issued an Administrative Order and have acquired TMF assistance

during the voluntary compliance process. Measurement of success will be a long-term evaluation and will require annual gathering of the Stakeholder Committee to discuss success, possible shortcomings, and improvements needed.

**§1420(C)(2)(E)** is addressed in the ROF in Section E “Public Involvement in Preparing the Missouri Capacity Development Report of Findings” and is summarized in the Executive Summary, page iii. The Advisory Committee was formed and from that group, outreach was provided through training, press releases, internet, newsletters, direct mail-outs, etc., as described in the answer to Question 1 of Solicitation and Consideration of Public Comments. An Appendix F provides some of the outreach efforts performed. A list of all the organizations invited to be on the Stakeholder Committee and the final Advisory Committee is provided in the Introduction of the ROF, page 3-4.

### **SECTION III – Strategy & Implementation**

1. Describe the State's current implementation efforts for its capacity development strategy, and
2. Describe the State's future plans for strategy implementation. Use loan program to enhance TMF Capacity, State Grant Programs for Water System, evaluating every year and meeting with Stakeholders every year to assess needs/modifications, update trainings, promoting regionalization alternatives for troubled systems which do not have TMF Capacity, Get early data for systems that are facing future compliance problems with future regulations,

#### **Current Set asides and funding allocations:**

The PDWP allocated three new Regional Office staff for enhanced Sanitary Surveys which include TMF Capacity Assessment, 1 TAP Staff specializing in Operator Certification/training and out-reach to non-community water systems for TMF Capacity Improvement, 1 TAP financial Staff to develop and perform financial capacity assistance.

Also, the PDWP moved one full time employee from the Central office PDWP to the Southwest Regional Office to focus on guidance for water system capacity development and incorporation into the enhanced Sanitary Survey.

SRF Set Aside for Technical Assistance to small water systems – The SRF Engineering Contract for Engineering Services is a Program developed in 1999 and entitles eligible recipients of the grant to choose an engineer to perform and engineering report to assess the entire water system needs in order to achieve and maintain the technical, managerial, and financial capacity, including all possible alternatives (i.e., regionalization, consolidation, resource sharing, etc.). Systems are awarded 90% of costs up to \$10,000 each for the engineering report services and must apply to the Water & Wastewater Review Committee for Project Development. A copy of the information relative to this contract is included in Appendix B.

The PDWP is currently in the process of forming Contracts for training with various organizations.

#### **SRF Program:**

TMF analysis is currently performed on all applicants of the SRF Program utilizing the TMF Checklist for Obtaining Construction Authorization and Permit to Dispense. The technical and managerial capacity requirements are performed during the Construction Authorization Process. The financial review is evaluated prior to assessing a loan and is a criterion for obtaining a loan.

#### **Future Set Aside Possibilities:**



The PDWP found the SRF Engineering Report Services Contract very beneficial and productive and will continue the SRF Engineering Services Contract, continue to support TAP with staff for financial capacity analysis and technical assistance, continue to support staff in the Regional Offices for enhanced sanitary surveys and training, and continue with the guidance document. Future financial compensation for the agreements made with Technical Assistance Providers is currently being considered. Potential funding for Regionalization/Consolidation efforts in areas of water systems compliance problems is also being considered.

## Rules:

The technical, managerial, and financial capacity requirements are required by existing water systems with Administrative Orders for Significant Non-Compliance as required in Missouri State Statute 640.115 and Missouri Regulations 10 CSR 60-3.010(3)(B) and 10 CSR 60-3.020(5) (See Appendix H). See Appendix H for the Administrative Penalty Assessment rule. A summary of the Administrative Order Provisions of the Proposed TMF Rules is as follows: Administrative Order provisions are addressed in two parts of the proposed TMF rules, subsection (3)(B)5. of the Permits rule (10 CSR 60-3.010) and section (5) of the Continuing Operating Authority rule (10 CSR 60-3.020). Both parts authorize the department to **revoke** the Permit to Dispense Water for CWSs or NTNCWSs, and the Permits rule also authorizes the department to **modify** a permit. Under these provisions, a permit can be revoked or modified only for:

- community water systems or nontransient noncommunity water systems against which an administrative order (AO) has been issued for significant noncompliance (SNC) with state or federal requirements **and** at which at least one of the following three deficiencies exists:
  - (1) the water system has failed to establish a continuing operating authority (COA) as defined in the rule, **or**
  - (2) the COA does not have the necessary technical, managerial, and financial capabilities to manage, operate, maintain, etc., a public water system, **or**
  - (3) the water system is not making substantial progress toward compliance with mandates of the administrative order.

### Use of Administrative Orders Related to TMF Rules

Each SNC-related administrative order should include a requirement (and milestones) for the water system to evaluate and establish COA and TMF capabilities, as defined in the rule. The administrative order should also include a statement that the Permit to Dispense **may** be revoked or modified if the system fails to meet COA and TMF requirements or fails to make substantial progress towards compliance with the AO.

## Technical Assistance/Agreements:

MRWA and MAP are currently assisting in water system training for Capacity Development to existing water systems and a copy of their Fy2000 Work Plans are included in Appendix I. Resource Surveys were performed within the Stakeholder Group to obtain the type of assistance that could be provided for different size and type systems. Several organizations, AWWA, MRWA, MAP, TAP, and MWWC, are willing to assist in on-site and off-site TMF assistance, as indicated on the resource surveys. A summary of that survey is also provided in Appendix I. The Technical Assistance Program is currently assisting water systems with financial assessment using the User Charge Analysis and will be assisting the PDWP in future financial assessments

as requested. The PDWP and TAP also provide training to Board Members and management staff by conducting the Environmental Management Institute (EMI) training 6 times per year offered in every region. This EMI training provides the knowledge how to properly manage water system operation, infrastructure and long-term fiscal management to maintain capacity and continuous service. On-site board member technical assistance is also offered by TAP to provide financial capacity analysis using the user charge analysis (APPENDIX J). This helps water systems plan for future needs for capital improvements to meet current and future requirements. On-site technical assistance is also provided by the Regional Office and TAP to improve managerial capacity and long-term planning. These current functions will continue to provide operators and management staff with knowledge of rules and upcoming regulations. Operator Certification training and technical assistance is also conducted in each regional office by Water Specialists. A copy of the Operator Certification Training opportunities for FY2000 is included in appendix I.

The PDWP is currently working with the Department of Health to finalize an implementation plan and tracking program. This will provide coordinated responses concerning potential outbreaks, response plans for non-community water systems, and identification of contaminants which pose special health risks to immune compromised individuals/children and develop public information and response plan for outbreaks. The associated documentation and minutes from those meetings are in Appendix TA.

The PDWP and the Missouri Banker's Association met to discuss incorporation of Capacity Development information/requirements into the annual training program and to incorporate Capacity Development and Permitting Requirements into the MBA's newsletters (See Appendix I for documentation).

### **Emergency Operation Plan (EOP):**

The Public Drinking Water Program requires all community water systems to have and maintain an updated EOP. The PDWP offers a Model EOP to water systems for development of their local plan. A copy of a form which is used to create the local EOP is incorporated in Appendix C. The PDWP tracks all systems that do not have an EOP and provides that list to the Regional Office quarterly for follow-up and future inspections needs (See Appendix C). Mutual aid agreements are encouraged in the EOP. This may increase communications between water systems.

### **REGIONAL OFFICE INSPECTION TRAINING:**

Every two years the PDWP trains the Regional Office Staff in the inspection process, use of the inspection checklist, report writing, upcoming regulatory requirements, and use of inventory. This will continue and as Capacity Development Checklists are modified, the RO staff will be trained in their use and applicability.

### **INVENTORY:**

The PDWP maintains an inventory system that tracks all water system information as noted in Appendix E. There is a field use form the Regional Office Inspector(s) may print out to use in the field prior to, during, or after an inspection to make necessary changes. The inventory tracks

all water systems by region, type, size, and treatment providing continuing operating authority information, address information, geographic service area information, management staff, operation staff, clerical staff, system capacity, monitoring and sampling requirements, operator certification requirements, source water information, alternate source information, storage information, and treatment information (see Appendix E).

A database is currently underway to track all systems required to maintain TMF Capacity and will be linked to the inventory system to also include new systems. There will be an inspection date for those systems so the Regional Offices will know which systems are required to have TMF assessment during inspections. A draft of a data mapping for the inventory system is included in Appendix E. This is where the information regarding TMF Capacity may be entered into the system and the database link will generate a report to indicate if systems are required to have TMF Capacity and comments.

### **Enforcement Tracking:**

The current compliance tracking systems enables the PDWP to know the time limits for the systems returning to compliance and monitor their success and this is reported to EPA quarterly. The Process for Enforcement is included in Appendix D. System compliance is tracked and enforced in accordance with the Escalation Policy as provided in Appendix B of the ROF (APPENDIX G). A Bilateral Compliance Agreement is issued to water systems in Significant Non-Compliance to voluntarily bring them into compliance within a specified time-frame. The system status, compliance history and type of violations are tracked and reported to EPA (See Appendix D for a sample).

If the system is under an Administrative Order for Significant Non-Compliance, the system will be required to have TMF Capacity. From this tracking system, a list will be generated of systems required to have the TMF assessment first (Class 1 systems in the ROF).

### **Regionalization Effort:**

The Engineering Report Services also encourages regionalization by requiring the evaluation of all possible alternatives and costs associated. Those systems looking into regionalization or consolidation are rewarded points in the priority ranking criteria.

The Continuing Operating Authority Rule 10 CSR 60-3.020 also requires new applicants for a proposed water systems to provide a waiver from an existing higher preference water system or prove the system is not available if the proposed facility is within the legal boundaries of the existing viable system. This may prevent potential future problems associated with very small water systems and makes use of an existing compliant system.

### **Future Assessment:**

The TMF Checklist will be evaluated as to its use efficiency and completeness and will be subject to revision at any time. The Stakeholder group will meet annually to discuss improvements needed, exchange tracking of systems which received TMF assessment and assistance, past year training, future training schedule, and TMF Checklist revisions. Based on

the coordinated effort from all the Technical Assistance Resources and the tracking process, a report will be generated to provide to EPA on the measurement of our success, any modification to the process needed, and future intended efforts.

### 3. Describe the basis on which the State believes that the program elements it has chosen, when taken as a whole, constitute a strategy to assist PWSs in acquiring and maintaining technical, managerial, and financial capacity.

The State of Missouri, through its Public Drinking Water Program (PDWP), is confident that the program elements selected and described in this document will strategically assist public water systems in acquiring and maintaining technical, managerial and financial capacity (TMF). The PDWP has fashioned a strategy that exhibits the general characteristics of strategic planning; the future effect of current decisions, process, philosophy, and structure.

Future Effect of Current Decisions. By working with the Citizens Advisory Committee and the public, the PDWP has examined the causes and effects of possible program decisions as they may affect the acquisition and maintenance of TMF by public water systems. The extensive consideration of enhancements and impairments to capacity has allowed the PDWP to understand how programmatic alternatives could influence TMF capacity. The strategy allows for programmatic decision-making (current decisions) that is geared toward improving TMF of public water systems (future effect).

Process. The strategy has met the requisite characteristic of strategic planning because it is a result of a *process* of strategic planning. Even as the Citizens Advisory Committee was beginning its work, the PDWP had determined that the strategy would be generated through a coordinated planning effort. As a matter of course, the PDWP considered and adhered to the guidelines and advice of the US Environmental Protection Agency in undertaking this strategic planning effort. This process -- determined in advance -- identified what the overall planning effort would be, when it would be done, who would do it, and what would be done with the results. The strategy process does not end with the issuance of this strategy document. Rather, this strategy is the first step in a continuous process of understanding and addressing the TMF capacity building needs of public water systems in the state.

Philosophy. An important shift in focus is another requisite characteristic of the strategic planning process. The PDWP has demonstrated, through the strategy, that the managers and staff of the Program believe that strategic planning is important in reaching the goals of improved TMF capacity of public water systems. This philosophical commitment to strategic improvement of public water systems – an underlying goal of the PDWP in Missouri for many years – is confirmed in this strategy document.

Structure. Finally, a strategy should formally link planning, operations, and budgeting together. This allows for a systematic and formalized effort to develop and implement objectives, policies and purposes. The strategy shows how the PDWP will integrate

operational, budgeting and planning functions to achieve TMF goals within the organizational structure of the program.

The Public Drinking Water Program's strategy for improving TMF capabilities of public water systems has looked to the future and made assumptions about the needs for TMF improvements, analyzed in detail how TMF goals might be accomplished, looked at the resources of the PDWP and stakeholders in meeting these goals, established priorities in implementing TMF improvements, monitoring performance and -- after measuring successes and setbacks -- reviewing the plan periodically and making adjustments.

The Missouri State Statute 640.115 and Missouri Regulations 10 CSR 60-3.010(3)(B) and 10 CSR 60-3.020(5) (See Appendix H) give the state the authority to implement TMF Capacity Requirements for those systems with Administrative Orders for significant non-compliance and those systems applying for SRF loans. The PDWP has the authority to revoke permits and also has assessment of penalty authority. The regulatory authority, enforcement capabilities of compliance tracking and enforcement will provide the state a means of ensuring TMF Capacity for non-compliant systems.

The Regional Office inspectors currently provide sanitary surveys and are trained in this area every 2 years. Incorporation of TMF Capacity Requirements in the enhanced sanitary surveys will be beneficial to all compliant systems as recommendations to improve TMF Capacity and will encourage future compliance. The continuance of management staff meetings upon exiting the enhanced sanitary surveys will educate the managers on the necessary future planning needs in all areas of TMF Capacity. Copies of the inspection forms and TMF Capacity forms are included in Appendix A.

The public outreach by the PDWP, the 6 Regional Offices, TAP and other water organizations also provide the state with extra resources to get the word out via publications, training, and system-specific assistance. The continued Public Official and manager training offered by TAP at the EMI sessions will increase the knowledge of the decision making staff as to their responsibilities in the water system and the need for future planning. Incorporation of Capacity Development training into other organization training plans is essential to proper outreach.

The coordination with the assisting agencies/organizations in the Advisory Committee to review the outreach efforts, the success of the efforts, and the changes needed in the strategy on an annual basis will be beneficial to the success of the strategy long-term. Meeting with the Advisory Committee prior to reporting to U.S. EPA should ensure a more complete evaluation of the success of the strategy.

The continued SRF Program and set-aside allocation to small water systems, to the Regional Office Staff, and to TAP are essential to the strategy. Also, the coordinated effort with the W&WWRC is essential to assure systems are not being compensated for poor operation and management prior to obtaining a loan/grant and to encourage use of existing systems having TMF Capacity. The Contract for Engineering Services to assist small systems in acquiring and maintaining TMF Capacity directly assists small water systems with obtaining funding for

project development, as there is a requirement the system apply to the W&WWRC for funding for project development.

The TMF Checklist and training for the use of the Checklist is essential for consistent application of TMF Capacity Recommendations/Requirements. This tool will be evaluated throughout the process for applicability and completeness.

The User Charge Analysis Software (Appendix J) developed and performed by the TAP will serve as the financial capacity assessment tool and will assist compliant systems with planning for future needs. For those systems with AO for SNC, the UCA will serve as a requirement for increase in user charges based on system needs as defined in the AO, in coordination with the PSC for those regulated systems. This will ensure financial capacity for future compliance in the technical and managerial areas.

The inventory tracking system and the field-use print outs (See Appendix E) essential for tracking system management information, infrastructure information, operator information, treatment information, sampling and monitoring information, etc. This is maintained at the PDWP and is updated with every change noted during inspections. This information will assure this information is accurate to date of last inspection (every 3 to 5 years) or as notified.

As a whole, the PDWP regulations for Permitting and Continuing Operating Authorities, the inter-department coordination, tracking, training, outreach, set-aside allocation, SRF program, enhanced sanitary surveys, TMF Checklists and financial assessment tool (the User Charge Analysis), and continued evaluation of the strategy implementation by the Advisory Committee will work together to provide a successful long-term Capacity Development Strategy for the state of Missouri.